

# SHOULD FINE NEEDLE ASPIRATION BIOPSY PERFORM ALL OF NODULES IN PATIENTS WITH NODULAR GOITRE?

Dr. Sevilay Ozmen<sup>1</sup>, Dr İlknur Calik<sup>1</sup>, Dr. Hilal Balta<sup>1</sup>, Dr. Ozge Timur<sup>2</sup>, Dr. Ayse Carlioglu<sup>3</sup>, Dr. Hakan Sevimli<sup>2</sup>, Dr. Senay Arikan Durmaz<sup>3</sup>, Dr. Ali Kurt<sup>1</sup>

<sup>1</sup> Department of Pathology, Erzurum Training and Research Hospital, Erzurum, Turkey

<sup>2</sup> Department of Internal Medicine, Erzurum Training and Research Hospital, Erzurum, Turkey

<sup>3</sup> Department of Endocrinology, Erzurum Training and Research Hospital, Erzurum, Turkey

## INTRODUCTION AND AIM:

Fine needle aspiration (FNA) biopsy has become widely accepted as a reliable method for diagnosis of malign thyroid nodule. In our study we aimed to review results of thyroid fine needle aspiration biopsy to be performed by same endocrinologist and compared to their histopathologic results after thyroidectomy.

## MATERIALS AND METHODS:

This retrospective study was done at the department of pathology for a period of two years from 2012 to 2014. The 401 patients applied to our endocrinology department due to solitary or multinodular goitre was included the study. Ultrasonography guide was used in all of FNA. FNA findings according to Bethesda classification were compared with corresponding histopathology findings, obtained with thyroidectomy specimens.

## RESULTS:

After thyroidectomy, we determined that 8 women (mean age 50.7 6.8 year) of 401 patients with nodular goitre had papillary thyroid cancer in a cross thyroidal lobe which FNA was not made, although finding of FNA was benign at one thyroid lobe which FNA was made. Moreover, multicentric papillary thyroid cancer was found in two of them after thyroidectomy.

## CONCLUSIONS:

Our landmark finding point out that FNA should be performed all of suspicious nodule rather than dominant nodule. On the other hand multicentric papillary thyroid cancer are still a problem, although FNA is widely used for evaluate cytology of nodules.

As a result, FNA is a sensitive and specific tests for the evaluation of thyroid nodular disease. FNA construction techniques, the experience cytologist and clinician effects results directly. In cytological examination may be individual differences. Reducing the error rate is made possible by the development of a common language between clinicians and pathologists. Classification containing 6 different diagnostic category proposed by Papanicolaou Society provide ease.

| FNAB Results                   | Group 1 (Benign) | Group 2 (Malign) | TOTAL      |
|--------------------------------|------------------|------------------|------------|
| BENIGN                         | 260              | 25               | 285        |
| AUS                            | 19               | 3                | 22         |
| NONDIAGNOSTIC                  | 67               | 2                | 69         |
| FOLLICULAR<br>NEOPLASM SUSPECT | 7                | 3                | 10         |
| MALIGNANCY<br>SUSPECT          | 0                | 4                | 4          |
| MALIGN                         | 5                | 7                | 12         |
| <b>TOTAL</b>                   | <b>358</b>       | <b>44</b>        | <b>402</b> |

**Table 1:** FNAB results of nodular goitre patients according to Bethesda 2007 classification

